REMARKS/ARGUMENTS

The Office Action dated June 10, 2009 and the reference cited therein have been carefully considered. In response to the Office Action, Applicants respectfully traverse the rejection of Claims 1-12 and 16-21.

In the Office Action, Claims 1-12 and 16-21 have been rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being obvious over, PCT Publication No. WO 02/070271 to Blanchet-Fincher. The Examiner states that the Blanchet-Fincher publication discloses a method for production of a film including the steps set forth in Claims 1 and 2. Applicants respectfully disagree.

1. The Blanchet-Fincher reference discloses an entirely different process than the process defined in Claims 1 and 2.

The Blanchet-Fincher reference discloses a method for effecting thermal transfer of an electroactive layer onto a substrate. The disclosed method involves laser irradiation of a metal heating layer on a donor element to first remove unwanted portions of the electroactive layer. The donor element (10) having the desired electroactive layer (12`) is then brought into contact with a substrate (30), wherein the electroactive layer (12`) is transferred from the donor element (10) to the substrate (30). This is an entirely different process than that of the claimed invention.

More specifically, the Blanchet-Fincher reference describes a thermal transfer process for structuring functional layers of organic material. In this process, a heating layer (16), a release layer (17) and one or more functional layers (12) comprising electrically active layers (13 and 15) are provided on a donor element (10). The donor element (10) is then brought together with a receiver element (20) having an adhesive layer (24), wherein portions of the functional layer (12) are transferred from the donor element (10) to the receiver element (20). (See Figures 1 and 2 of the Blanchet-Fincher reference.)

When the assembly (25) is partially irradiated (R) with heat or light, heat is generated in the heating layer (16) of the donor element (10). As a result, the heated areas (12") of the functional layer (12) stick to the adhesive layer (24) of the receiver element (20). It is important to note that, in this process, only the unwanted areas (12") of the functional layer (12) are heated,

(i.e., those areas (12") which are not meant to be used electrically and which, therefore, are permitted to be damaged by the heat).

When the receiver element (20) is removed from the donor element (10), the heated areas (12') which were not heated remain on the donor element (10). (See Figure 3 of the Blanchet-Fincher reference). The structured functional layer (12') that remains on the donor element (10) is then laminated onto a substrate (30), which can be a portion of an electronic organic device. (See page 13, lines 2-5 and Figure 4 of the Blanchet-Fincher reference). Afterwards, the donor element (10) is removed and the structured functional layer (12') remains on the substrate (30). (See Figure 5 of the Blanchet-Fincher reference.)

In contrast, according to the method of the present invention, a base film (51) is used as a substrate for the reception of electrical functional layers (47) of an electrical component. The base film (51) has a radiation-cross-linkable adhesive layer (57), which is placed in direct contact with an electrical functional layer (47) of a transfer film (41). The adhesive layer (57) of the base film (51) is irradiated to enable it to receive the electrical functional layers (47) from a transfer film (41). Thus, the desired portions of the electrical functional layer (47) are transferred from the transfer film (41) to the base film (51) to produce an electrical component.

Comparing all of the elements of the Blanchet-Fincher process with the elements of the claimed invention reveals two entirely different processes. Assuming that the donor element (10) of the Blanchet-Fincher process corresponds to the transfer film (41) of the claimed invention, and further assuming that the receiver element (20) of the Blanchet-Fincher process corresponds to the base film (51) of the claimed invention, it is first immediately apparent that the receiver element (20) of the Blanchet-Fincher process does not have an adhesive layer applied in a pattern form or irradiated in pattern form, as defined in Claims 1 and 2. Instead, and as noted by the Examiner, it is the heating layer (16) of the opposite donor element (10) of the Blanchet-Fincher process that is heated to effectuate the transfer of the electrical functional layers (12").

Moreover, as described above, only the unwanted portions (12") of the electrical functional layer are transferred from the donor element (10) to the receiver element (20) during

the heating process. The portions (12') intended to become electrical components remain on the donor element (10) after heating. The exact opposite occurs in the process steps defined in Claims 1 and 2, wherein the desired electrical functional layers (47) are transferred from the transfer film (41) to the base film (51), wherein the base film (51) becomes the electrical component and the transfer film (41) is subsequently discarded.

There is no teaching or suggestion in the Blanchet-Fincher reference to create an electrical component on the receiver element (20), as is done according to the claimed invention. Furthermore, this would not even be possible with the process described in the Blanchet-Fincher reference because the functional areas (12") transferred to the receiver element (20) would necessarily be damaged due to the development of heat from the heating layer (16). Therefore, the Blanchet-Fincher reference discloses an entirely different process than that defined in Claims 1 and 2.

2. The Blanchet-Fincher reference does not disclose an adhesive layer applied to a base film in pattern form or irradiated in pattern form for adhering to an electrical functional layer of a transfer film, as defined in Claims 1 and 2.

In rejecting Claims 1 and 2, the Examiner refers to the heating layer (16) of the donor element (10) described in the Blanchet-Fincher reference as the adhesive layer of Claims 1 and 2. The Examiner further states that this heating layer (16) is irradiated in the form of a pattern. Applicants respectfully submit that the heating layer (16) described in the Blanchet-Fincher reference is not an adhesive layer, as defined in Claims 1 and 2.

First, it is important to note that the heating layer (16) described in the Blanchet-Fincher reference is part of the donor element (10), which at best can only be considered equivalent to the transfer film of Claims 1 and 2. In contrast, the adhesive layer defined in Claims 1 and 2 is applied to the opposite base film. Thus, the Blanchet-Fincher reference does not disclose an adhesive layer applied to a base film in pattern form or irradiated in pattern form for adhering to an electrical functional layer of a transfer film, as defined in Claims 1 and 2.

Second, the heating layer (16) of the Blanchet-Fincher reference can not be considered an adhesive layer as defined in Claims 1 and 2. The heating layer (16) according to the Blanchet-Fincher reference is made of metal and, obviously, does not have any adhesive properties.

Moreover, this heating layer (16) does not serve as an adhesive layer for receiving an electrical functional layer as defined in the claims. Instead, the heating layer (16) according to the Blanchet-Fincher reference is only partially heated by radiation and causes a partial heating of areas (12") of the transfer film (10), which then stick to the receiver element (20) according to the Blanchet-Fincher process. It cannot be deducted from the Blanchet-Fincher process that the adhesive cross-links in the areas (12") where the heated functional layers (12) stick.

The heating layer (16) of the Blanchet-Fincher process is radiation-sensitive only in the sense that it absorbs laser radiation (R) and converts the radiation into heat. (See page 8, first paragraph of the Blanchet-Fincher reference.) However, this laser radiation (R) is not a radiation to be used as a cross-linking energy according to the present invention.

Particularly, Blanchet-Fincher does not arrange for a radiation without the generation of heat. According to the Blanchet-Fincher reference, a partial treatment with heat of areas (12") of the functional layer (12) is necessary so that those areas (12") of the functional layers (12) can be transferred.

Thus, the Blanchet-Fincher reference does not disclose an adhesive layer applied to a base film in pattern form or irradiated in pattern form for adhering to an electrical functional layer of a transfer film, as defined in Claims 1 and 2.

3. The Blanchet-Fincher reference does not disclose a radiation-cross-linkable adhesive, as defined in Claims 1 and 2.

It is further immediately apparent that the only adhesives mentioned in the Blanchet-Fincher reference are not radiation-cross-linkable compounds, as defined in Claims 1 and 2, because these adhesives are polymers for which the cross-linking has already occurred. Radiation-cross-linkable adhesives usually comprise monomers or oligomers, which cross-link into polymers only during radiation. However, this is not the case for the adhesives mentioned in the Blanchet-Fincher reference. In particular, there is absolutely no mention in the Blanchet-Fincher reference of adhesives which are radiation-cross-linkable by means of UV-radiation.

Instead, the adhesives mentioned in the Blanchet-Fincher reference are thermally cross-linkable adhesives. Starting from the Blanchet-Fincher reference, a person skilled in the art

would have to add a photo initiator to the adhesives mentioned in the Blanchet-Fincher reference to obtain a radiation-cross-linkable compound as set forth in Claims 1 and 2. Further, the skilled person would have to provide films and layers which can be penetrated by radiation in order to harden the radiation-cross-linkable adhesive, as defined in Claims 1 and 2. Therefore, the substitution of the thermally cross-linkable adhesives of the Blanchet-Fincher reference with a radiation-cross-linkable adhesive would require several steps which basically contradict the teaching of Blanchet-Fincher. Thus, it is not obvious for a skilled person to substitute the thermally cross-linkable adhesives described in the Blanchet-Fincher reference with a radiation-cross-linkable adhesive.

The use of an adhesive which is radiation-cross-linkable by UV-radiation makes possible UV-hardening without the generation of heat ("cold hardening"). As a result, direct use of the base film (51) of the present invention as a substrate for one or more electrical components is made possible. Thus, there is no damage of functional layers of the electrical components from thermal stress.

In this process, the adhesive layer itself may (according to its electrical conductivity) provide a functional layer of the electrical component (dielectric material, isolator, electrode). The result thereof is a flawless electrical component which can be produced significantly faster, simpler and therefore more cost-effective.

Accordingly, for all of the foregoing reasons, it is respectfully submitted that independent Claims 1 and 2, and the claims that depend therefrom, patentably distinguish over the prior art.

In reviewing the Specification of the present application several typographical errors have been noted with respect to reference numerals in the drawings. Applicants have taken the present opportunity to amend the Specification to correct these errors.

In view of the foregoing amendment and remarks, favorable consideration and allowance of the application with Claims 1-26 are respectfully solicited. If the Examiner believes that a telephone interview would assist in moving the application toward allowance, he is respectfully invited to contact the Applicants' attorney at the telephone number listed below.

Respectfully submitted,

/steven t zuschlag/
Steven T. Zuschlag
Registration No.: 43,309
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
STZ/aca

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